

#### Abstract of the Disclosure

A method for sterilizing a device, includes the following steps: contacting the device with liquid sterilant outside or inside a sterilization chamber at a first pressure, placing the device in the chamber before or after the contacting step, and decreasing the pressure of the chamber to a second pressure below the vapor pressure of the liquid sterilant. At least the decrease in pressure below about the vapor pressure of the liquid sterilant occurs at a pumpdown rate of less than 0.8 liters per second, calculated based on the time required to evacuate the chamber from atmospheric pressure to 20 torr when the chamber is empty and dry.